

CLAIMS

1. A silver alloy comprising a composition containing at least four elements including Ag (silver) as its major component, 0.10 to 2.89 wt% of Pd (palladium), 0.10 to 2.89 wt% of Cu (copper) and 0.01 to 1.50 wt% of Ge (germanium), and the total amount of Pd, Cu and Ge is 0.21 to 3.00 wt%.
2. The silver alloy according to Claim 1, the silver alloy having a composition excluding any component other than the four elements wherein the content of Ag is 97.00 to 99.79 wt%.
3. The silver alloy according to Claim 1 or 2, wherein the ratio of the content of Cu to the content of Ge, namely, Cu content/Ge content is (1/20) to (20/1).
4. The silver alloy according to Claim 1 or 2, the silver alloy having a reflectance of 90% or more for light having a wavelength of 550 nm after heat-treated at 250°C for one hour in the air.
5. The silver alloy according to Claim 3, the silver alloy having a reflectance of 90% or more for light having a wavelength of 550 nm after heat-treated at 250°C for one hour in the air.
6. The silver alloy according to Claim 1 or 2, the silver alloy having a reflectance of 75% or more for light having a wavelength of 550 nm after exposed to a 100 ppm hydrogen sulfide atmosphere at ambient temperature for 48 hours.
7. The silver alloy according to Claim 3, the silver alloy having a reflectance of 75% or more for light having a wavelength of 550 nm after exposed to a 100 ppm hydrogen sulfide atmosphere at ambient temperature for 48 hours.
8. The silver alloy according to Claim 1 or 2, the silver alloy having a reflectance of 88% or more for light having a wavelength of 550 nm after exposed to a high temperature and high humidity atmosphere of 85°C and 90 RH% for 200 hours.
9. The silver alloy according to Claim 3, the silver alloy having a reflectance of 88% or more for light having a wavelength of 550 nm after exposed to a high temperature and high humidity atmosphere of 85°C and 90 RH% for 200 hours.
10. The silver alloy sputtering target material formed of the silver alloy as claimed in Claim 1, 2, 3, 4, 5, 6, 7, 8 or 9.

11. The silver alloy thin film formed of the silver alloy as claimed in Claim 1, 2, 3, 4, 5, 6, 7, 8 or 9.
12. The silver alloy thin film according to Claim 11, the silver alloy thin film having a reflectance of 90% or more for light having a wavelength of 550 nm after heat-treated at 250°C for one hour in the air.
13. The silver alloy thin film according to Claim 11, the silver alloy thin film having a reflectance of 75% or more for light having a wavelength of 550 nm after exposed to a 100 ppm hydrogen sulfide atmosphere at ambient temperature for 48 hours.
14. The silver alloy thin film according to Claim 11, the silver alloy thin film having a reflectance of 88% or more for light having a wavelength of 550 nm after exposed to a high temperature and high humidity atmosphere of 85°C and 90 RH% for 200 hours.
15. The silver alloy thin film according to Claim 11, 12, 13 or 14, said silver alloy thin film being a reflecting film.
16. The silver alloy thin film according to Claim 11, 12, 13 or 14, said silver alloy thin film being a thin type semi-transmissive film.
17. The silver alloy thin film according to Claim 11, 12, 13 or 14, said silver alloy thin film being a patterned electrode or wiring.
18. A self-emitting type display comprising the reflecting film as claimed in Claim 15 or a perforated semi-transmissive film obtained by forming light transmissive holes that transmit a part of incident light in the reflecting film as claimed in Claim 15.
19. A flat panel display comprising the reflecting film as claimed in Claim 15 or a perforated semi-transmissive film obtained by forming light transmissive holes that transmit a part of incident light in the reflecting film as claimed in Claim 15.
20. A reflecting electrode comprising the reflecting film as claimed in Claim 15 or a perforated semi-transmissive film obtained by forming light transmissive holes that transmit a part of incident light in the reflecting film as claimed in Claim 15.

21. Electronic parts comprising using the silver alloy thin film as claimed in Claim 11, 12, 13, 14, 15, 16 or 17.
22. An optical disk medium comprising at least one of the reflecting film as claimed in Claim 15 and the thin type semi-transmissive film as claimed in Claim 16.
23. Light parts comprising the reflecting film as claimed in Claim 15.
24. A silver alloy thin film according to Claim 15, wherein said silver alloy thin film is an electromagnetic shielding film.
25. A silver alloy paste material formed of the silver alloy as claimed in Claim 1, 2, 3, 4, 5, 6, 7, 8 or 9.